

# *Notiospathius*, a New Neotropical Genus (Hymenoptera: Braconidae)

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## ABSTRACT

The new genus *Notiospathius* is proposed for those species from Central and South America formerly placed in *Spathius*. The type-species *N. terminalis* (Ashmead) is redescribed and *Stenophasmus apicalis* Ashmead is a new synonym of it. Thirteen previously described species are transferred to the new genus.

A recent revision of the North American *Spathius* (Matthews, 1970) pointed out that the spathiines appeared to have undergone extensive radiation in Central and South America. However, while sharing the general habitus of typical *Spathius*, certain striking venation anomalies suggested that these Neotropical species may not be congeneric with *Spathius* as currently defined. Further study has confirmed this; therefore, as a prelude to a published revision of the Neotropical spathiines, those described species belonging to this group are here segregated into a newly described genus, *Notiospathius* to allow their more accurate placement in the Doryctinae in the Braconidae section of the forthcoming *Hymenopterorum Catalogus* being prepared by Dr. R. D. Shenefelt.

*Notiospathius* Matthews and Marsh, new genus

*Type-species*.—*Stenophasmus terminalis* Ashmead, 1894. Present designation.

*Description*.—Head subcubical, variously sculptured; occipital carina fused with hypostomal carina ventrally; first flagellar segment longer than second; fore wing with 3 cubital cells; recurrent vein entering first cubital cell, rarely interstitial with first intercubitus; subdiscoideus leaving first brachial cell below middle; hind wing with medi-

len cell narrow, its widest part less than  $\frac{1}{2}$  greatest hind wing width; first segment of mediella about 6X basella length; radiella absent or at most very weakly developed; abdomen petiolate; first abdominal tergum lengthened, and distinctly dilated towards apex; fore tibia with a row of 5 or more stout spines on anterior edge; ovipositor varying in length.

The species included in this genus are superficially similar to those in the genus *Spathius*, but differ in wing venation by having the recurrent vein received by the first cubital cell and the subdiscoideus arising below the middle of the brachial cell in the fore wing and by the narrow mediellen cell, very long first segment of the mediellen and absence or only weak development of the radiella in the hind wing. This venation is widespread among Neotropical braconids having the *Spathius* general habitus. However, several other less common venation types also exist among undescribed Neotropical spathiines, including one specimen which was found to possess the typical *Spathius* venation (recurrent vein received by second cubital cell, the subdiscoideus arising above the middle of the brachial cell in the fore wing and mediellen cell at least as wide as  $\frac{1}{2}$  hind wing width, the first segment of the mediella not more than 3X basella length and radiella distinct).

Another character which is useful in distinguishing the two is shape of the hind coxa. In many *Spathius*, including all North American species, there is a ventral tooth near the base of the hind coxa. This ventral tooth is absent in *Notiospathius* (and some Oriental species of *Spathius*).

*Notiospathius terminalis* (Ashmead), n. comb.  
(Figs. 1-2)

*Stenophasmus terminalis* Ashmead, 1894, p. 114.  
*Stenophasmus apicalis* Ashmead, 1900, p. 296.  
(Not *Stenophasmus apicalis* Westwood, 1882).  
Nomen nudum.

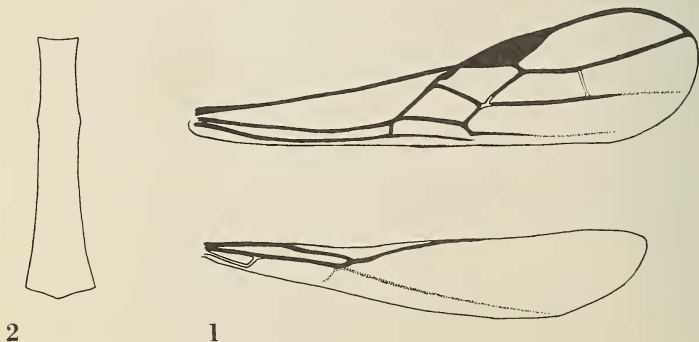
*Female*.—Body length, 4.0-6.0 mm; ovipositor 4.0-5.5 mm. Color brownish orange, palpi and fore and mid coxae tan, antennal tips white, ovipositor sheaths brown except white subapical annulus. Head subcubical, vertex and frons uniformly transversely striate; temples smooth; malar space smooth, about  $\frac{1}{3}$  eye height; temple width about  $\frac{2}{3}$  eye height; ocellar triangle slightly wider than long, lateral ocelli separated by less than their diameters; ocellular distance less than width of ocellar triangle; antennae about as long as body, each with about 36 flagellomeres, the apical 6 white. Pronotum with distinct wide lateral areas with several irregular cross carinae; proepisternum rugulose; notauli weakly impressed, fused posteriorly into broad area of longitudinal rugosity; mesonotal lobes strongly transversely rugose, median lobe weakly depressed centrally; scutellar furrow deep, with 4-6 cross carinae; scutellar disc smooth; mesopleural disc smooth and shining above

sternaulus, becoming longitudinally rugose-striate dorsally; mesosternum smooth; sternaulus shallow with weak cross carinae anteriorly; prepectal carina complete; prepectal area smooth; propodeum sloping gradually to petiole, lacking distinct carinae or defined areas, rather the whole longitudinally strigose-granular becoming rugulose laterally. Fore tibiae with an irregular row of 6-9 spines along anterior margin and a row of 6 or 7 apically; hind coxae elongate cylindrical with a basal tooth ventrally and weakly transversely strigose-granular dorsally. Wings hyaline, veins light brown; venation as in Fig. 1. Petiole (Fig. 2) straight,  $3\frac{1}{2}$  times as long as apical width and about as long as hind tibiae, uniformly coarsely granular, except apical medial lobe smooth; tergum (2 + 3) strongly granular over basal  $\frac{3}{4}$ , apically smooth, the lateral margins thickened along full length; tergum 4 with weaker granular sculpture anterior to subapical transverse row of setae and lateral margins thickened; remaining terga smooth; ovipositor about equal to body length.

*Male*.—Essentially as in female; vertex and frons only weakly transversely striate; mesonotum granular, lacking distinct transverse strigosity; antennae entirely brown with 29-31 flagellomeres.

*Distribution*.—West Indies: Islands of St. Vincent and Grenada.

Ashmead described this species from 23 specimens, of which 10 are now in the U. S. National Museum, the remainder being in the British Museum (Natural History). We are deferring any lectotype



Figs. 1 and 2, *Notiospathius terminalis* (Ashmead): 1, fore and hind wings of female; 2, first abdominal tergum of female.

designations until all of the specimens concerned are studied.

Based on examination of all but 3 of the types, we here transfer 13 other described Neotropical braconids to *Notiospathius*. All appear to possess the characters of the genus and are listed below together with the location of the type. Redescriptions are deferred until a full revision and keys can be presented. The two Fabricius species were not seen, but appear to belong here based on comments by Schulz (1912) and Townes (1961).

*Notiospathius caudatus* (Szepligeti), n. comb.

*Psenobolus caudatus* Szepligeti, 1902. Term. Fuz. 25: 49. Brazil. (Budapest)

*Notiospathius columbianus* (Enderlein), n. comb.

*Psenobolus columbianus* Enderlein, 1912. Archiv Naturges. 78(A) (2): 6. Colombia. (Warsaw)

*Notiospathius diversus* (Szepligeti), n. comb.

*Spathius diversus* Szepligeti, 1902. Term. Fuz. 25: 50. Brazil. (Budapest)

*Notiospathius eleutherae* (Ashmead), n. comb.

*Spathius eleutherae* Ashmead, 1896. Bull. Lab. Nat. Sci. St. Univ. Iowa 1896: 32. Bahamas. (Ames, Iowa)

*Notiospathius flavotestaceus* (Ashmead), n. comb.

*Spathius flavotestaceus* Ashmead, 1895. Proc. Zool. Soc. London 1895: 783. Grenada. (London)

*Notiospathius fuscipes* (Cameron), n. comb.

*Spathius fuscipes* Cameron, 1887. Bio. Cent.-Amer., Hymen. 1: 381. Panama. (London)

*Notiospathius leucacrodera* (Enderlein), n. comb.

*Psenobolus leucacrodera* Enderlein, 1912. Archiv Naturges. 78(A) (2): 8. Brazil. (Warsaw)

*Notiospathius meliorator* (Fabricius), n. comb.

*Pimpla meliorator* Fabricius, 1804. Systema Piezatorum, p. 118. British Guiana. (Copenhagen)

*Notiospathius necator* (Fabricius), n. comb.

*Pimpla necator* Fabricius, 1804. Systema Piezatorum, p. 117. British Guiana. (Copenhagen)

*Notiospathius ornaticornis* (Cameron), n. comb.

*Spathius ornaticornis* Cameron, 1887. Bio. Cent.-Amer., Hymen. 1: 381. Panama. (London)

*Notiospathius sculpturatus* (Enderlein), n. comb.

*Psenobolus sculpturatus* Enderlein, 1912. Archiv Naturges. 78(A) (2): 7. Columbia. (Warsaw)

*Notiospathius striatifrons* (Cameron), n. comb.

*Spathius striatifrons* Cameron, 1887. Bio. Cent.-Amer., Hymen. 1: 382. Panama. (London)

*Notiospathius tinctipennis* (Cameron), n. comb.

*Spathius tinctipennis* Cameron, 1887. Bio. Cent.-Amer., Hymen. 1: 379. Panama. (London)

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